

REMARKS

The above amendments and following remarks are submitted under 37 C.F.R. 1.116 in response to the final official action of the Examiner mailed September 22, 2005. This amendment is deemed to fully respond to all objections and rejections of the Examiner. Thus, claims 1-25, being all pending claims, are now expected to be in condition for allowance. Entry of this amendment and reconsideration to that end is respectfully requested.

The Examiner has made a Requirement for Information under 37 C.F.R. 1.105 for:

Date of the invention of the Unisys CMP architecture. Applicants do not understand this request. Applicants admit that the assignee of the present application has a number of patent applications in various stages of prosecution relating to various aspects of the CMP product. On information and belief, none of these patent applications specifically claims "the Unisys CMP architecture". In addition, none of the claims finally rejected claims any "Unisys CMP architecture" element.

The Unisys CMP product was developed over a period of time and market released as a commercial product as is well known to the Examiner. The record already reflects the date of market release of the Unisys CMP product. Because the various patent applications related to the Unisys CMP product, the Unisys CMP

product itself, and the subject patent application have been commonly assigned before the dates of invention, it is not understood how the Examiner's request for information can have any relevance in view of 35 U.S.C. 103.

From his request for information it is assumed that the Examiner continues to confuse the issues of what is admittedly taught in a printed prior art reference (i.e., the press release of Unisys dated May 13, 1998) with that which is not taught in that prior art reference even though it may have been secretly known to the assignee. Having confused these issues, the Examiner then insists upon holding certain material to have been disclosed by the May 13, 1998 reference, even though the Examiner admits that the reference does not disclose this material on its face. Though the holdings of the Examiner in this regard are incorrect as a matter of law, Applicants have herewith amended claims 2, 8, 14, and 25 to assist the Examiner in focusing upon a proper examination of the pending claims.

Claims 1, 4-7, 9-13, 15-19, and 21-24 have been rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,928,327, issued to Wang et al (hereinafter referred to as "Wang"). This ground of rejection is respectfully traversed as to the amended claims for the reasons provided below.

As has been previously explained and is highlighted throughout the specification and drawings, it is critical to

Applicants' invention to employ an overall video on demand system architecture which promotes efficiency and modularity.

Efficiency is greatly enhanced by handling the input/output intensive video streaming function with one or more relatively simply video processors having a first hardware and software architecture, and assigning the remainder of the data processing functions to a relatively versatile and complex large scale computer having a different, second hardware and software architecture. Modularity is enhanced by this approach, because the additional input/output intensive video streams arising from an increased subscriber base are easily accommodated through the addition of more video processors. The load on the transaction processor, on the other hand, will be most easily increased by additional functionality, which is accommodated in a normal data processing approach by adding memory, instruction processors, and application software.

During operation, the video processor limits its activity to streaming video from a temporary memory to the subscribers. All other functions are performed by the transaction processor, including spooling requested video programs into the temporary memory. Thus, as the number of subscribers increases, the number of video processors can be easily increased. On the other hand, as the available on demand functions increase (e.g., larger video library, added gaming features, etc.), the multi-processor

transaction server is increased in capacity by adding standard multi-processor system resources.

In rejecting claim 1, the finds that Fig. 1A element 110 (i.e., central control module) corresponds to the claimed "first processor" and Fig. 1A element 120 (i.e., distribution module) corresponds to the claimed "second processor". Wang is readily distinguishable over claim 1 because elements 110 and 120 employ the same processors. Column 4, lines 41-42, states:

....CPU 112 (preferably a PENTIUM microprocessor manufactured by the Intel Corporation).

Similarly, column 5, lines 1-21, states:

CPU 125 is preferably a PENTIUM processor manufactured by the Intel Corporation.

Thus, Wang cannot have the modularity and efficiency of the claimed invention as taught throughout Applicants' specification, because it utilizes the very same processor for both applications.

This distinction has been previously argued to the Examiner. In his response to this argument in the pending final action, the Examiner states:

In response to applicant's argument that the references fail to show certain features of application's invention, it is noted that the features upon which applicant relied (i.e.,...because it utilizes the very same processor for both applications) are not recited in the rejected claim(s).

This statement is clearly erroneous. Claim 1, for example, is limited by "a second processor having a second hardware

architecture different from said first hardware architecture".

It is not understood how the Examiner can ignore this limitation.

Perhaps to further confuse the issue, the Examiner states at the top of page 6 of the pending rejection:

Note: limitation "1st and 2nd hardware and software architecture" is inherently met by Wang's system.

This statement is legally irrelevant, because it does not address the claimed invention which requires that the first and second architectures are different.

The statement is also legally inadequate because it does not meet the requirements of MPEP 2112 which requires that the Examiner show that the claimed feature "must necessarily" be found in the prior art. The Examiner has not and can not do so.

Finally, the statement is clearly erroneous as a matter of fact. Wang specifically teaches that the processors of Wang's system have the same hardware and software architecture, because both are Intel Pentium processors. Claims 1 and 6 have been slightly amended to specifically highlight the requirement for different hardware architectures.

The efficiency of the Wang approach is further limited by the need of central control module 110 to both load and unload video programming into memory buffer 114. This is readily apparent, because memory buffer 114 and CPU 112 are components of the same motherboard which is central control module 110 (see

column 6, lines 38-48). Wang describes the unloading operation at column 7, lines 11-12, states:

....allows CCM 110 to write data to DM 120 as if CCM 110 were writing to a conventional disk drive...

In other words, in the claimed invention, the first processor writes (i.e., spools) into the video memory and the second processor reads (i.e., streams) from the video memory. This directly promotes efficiency of operation.

For these reasons, claim 1 is readily distinguishable from Wang. Therefore, the rejection of claim 1, and all claims depending therefrom, is respectfully traversed.

Claim 4 depends from claim 1 and further limits the claimed first processor to a "transaction server" coupled to a "subscribing receiver". Wang has no "subscribing receiver". Therefore, Wang cannot meet this limitation. The Examiner has clearly erroneously equated client 101 of Wang to the claimed "subscribing receiver". This finding is clearly erroneous in view of the description of client 101 by Wang at column 6, lines 1-3, which states:

Each video client 101 is a computer which generates video control signals. (Emphasis added)

According to Wang, client 101 is a generator of "video control signals" and not a "receiver" as claimed.

Having previously made this argument, the Examiner responds: In response, the Examiner respectfully disagrees with Applicant because "subscribing receiver" is broadly read on Wang's client 101, as a "subscribing receiver".

Having more completely stated his conclusion, the Examiner again fails to show any authority which permits him to read the "computer" of Wang as the claimed television set. The rejection of claim 4 is respectfully traversed.

Claim 5 depends from claim 4 and further limits the format of the requested video program. Wang cannot meet the limitations of the claims from which claim 5 depends as explained above. Therefore, Wang cannot meet the further limitations of claim 5. Thus, the rejection of claim 5 is respectfully traversed.

Claim 6 is an independent apparatus having four basic elements. In clearly erroneously finding the first element, "two subscribing television receivers", the Examiner cites Fig. 1A, element 150. The claim requires two. Wang has only one element 150. Surely, the Examiner can distinguish between the claimed two and the disclosed one. Furthermore, Wang discloses that element 150 is a "control input source" (see column 5, line 46). It is not understood how the Examiner can find one "control input source" to be the same as the claimed two "subscribing television receivers".

The remaining limitations are also not found, as explained above. Unlike the claimed invention, elements 110 and 120 of Wang have identical hardware architectures (both are Intel Pentium processors). Similarly, as explained above, in the Wang system, memories 114 and 130 are both loaded and unloaded by

central control module 110. The rejection of claim 6, and all claims depending therefrom, is respectfully traversed.

Claim 7 depends from claim 6 and further limits the claimed video processor. For the reasons stated above, Wang does not have the claimed video processor. Therefore, Wang cannot have these further limitations. The rejection of claim 7 is respectfully traversed.

Claim 9 depends from claim 8 and further limits the format of the video program. At page 12, paragraph 2, the Examiner admits that Wang does not meet the limitations of claim 8. Therefore, claim 9 which depends from claim 8 cannot possibly be anticipated by Wang as admitted by the Examiner. The rejection of claim 9 is respectfully traversed as being inconsistent with controlling law.

Claim 10 depends from claim 6 and further limits the claimed transaction server. For the reasons stated above, Wang does not have the claimed transaction server. Therefore, Wang cannot have these further limitations. The rejection of claim 10 is respectfully traversed.

Claim 11 is an independent apparatus claim having means-plus-function limitations. For the reasons discussed above, Wang does not have the claimed "transaction processing means" or the "video processing means". Nevertheless, in rejecting claim 11, the Examiner finds:

...without passing the requested video on demand program through the transaction processing means (the 1st processor 112 does not decode the requested video data from the memory 114, 130) and from streaming the requested VOD program at a 1st time to the 1st requesting means and at a 2nd and later time to the 2nd requesting means (Col. 19, lines 64-Col. 21, lines 27).

This statement is legally irrelevant, because it does not address the claimed limitation. The issue is not whether the claimed "transaction processing means" decodes the program, the claim requires that the requested program is not passed through the "transaction processing means". The statements of the Examiner and his citations of Wang clearly show that this limitation is not met, because the program must pass through CCM 110 to reach DM 120 from storage 131. Therefore, the rejection of claim 11, and all claims depending therefrom, is respectfully traversed, because the Examiner admits that Wang does meet the limitations of the claim.

Claim 12 depends from claim 11 and further limits the "requesting means" to a "subscriber box". In making his rejection, the Examiner inconsistently states:

Claim 12, wherein the 1st requesting means further comprises a subscriber box (Fig. 1A, el. 101 is a computer box).

This statement is inconsistent, because it correctly states that element 101 "a computer box". However, Applicants' do not claim a "a computer box". They claim a "subscriber box". Clearly, the Examiner's finding is legally irrelevant, because it does not

address the claimed invention. The rejection of claim 12 is respectfully traversed.

Claim 13 depends from claim 12 and further limits the claimed video processing means. For the reasons stated above, Wang does not have the claimed video processing means. Therefore, Wang cannot have these further limitations. The rejection of claim 13 is respectfully traversed.

Claim 15 depends from claim 11 and further limits the claimed transaction processing means. For the reasons stated above, Wang does not have the claimed transaction processing means. Therefore, Wang cannot have these further limitations. The rejection of claim 15 is respectfully traversed.

Claim 16 is an independent method claim having five basic steps. Wang does not meet elements c, d, or e, (i.e., "spooling" and two "streaming" steps), because Wang does not have the two different architectures for the transaction and video processors and because Wang does not stream directly from memory as claimed. The rejection of claim 16, as amended and all claims depending therefrom, is respectfully traversed.

Claim 17 depends from claim 16 and further limits the two streaming steps. Wang cannot meet this limitation because it has no provision determining whether to service two non-coincident requests from a single stream or from two streams. The rejection of claim 17 is respectfully traversed.

Claim 18 depends from claim 17 and further defines the criterion for determining whether to generate one or two streams. Notwithstanding the Examiner's legally irrelevant statements relating to hardware passband limitations, Wang has no provision for this functionality. The rejection of claim 18 is respectfully traversed.

Claim 19 depends from claim 17 and is further limited by a "fast forward" streaming option. For the reasons stated above, Wang does not have this function because Wang employs a different and less efficient streaming technique. Furthermore, the citation by the Examiner specifically omits "fast forward" as an available function. The rejection of claim 19 is respectfully traversed.

Claim 21 is an independent apparatus claim. In making his rejection, the Examiner states:

Claim 21, is analyzed with respect to claim 11. Claim 11 is an independent apparatus claim having means-plus-function limitations. As such, it must be examined in accordance with MPEP 2181 et seq. Claim 21 does not have means-plus-function limitations. Therefore, claim 21 is not to be examined in accordance with MPEP 2181 et seq as a matter of law. The Examiner has been reminded of the legal distinction between claims 11 and 21 and has apparently chosen to ignore controlling

law. The rejection of claim 21 is respectfully traversed as improperly examined.

Claims 22 and 23 each depend from claim 21. Claim 22 further limits the first architecture and claim 23 further limits the second architecture. As explained above, Wang employs the identical architectures for both CCM 110 and DM 120. Therefore, the Examiner's statements in rejecting claims 22 and 23 cannot both be true (i.e., CCM 110 cannot be optimized for a first task and DM 120 be optimized for a second because they have the same Intel Pentium architecture). Clearly the Examiner has chosen to ignore this error in logic. The rejection of claims 22 and 23 are respectfully traversed.

Claim 24 depends from claim 21 and further limits the memory. For the reasons stated above, Wang does not have the claimed memory. Therefore, Wang cannot have these further limitations. The rejection of claim 24 is respectfully traversed.

Claims 2-3, 8, 14, and 25 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Unisys CMP Blends SMP and Clustering for High-End NT (hereinafter referred to as "Unisys"). Though Unisys admittedly does not disclose that for which the Examiner has cited it, the Examiner has persisted in his rejection. The position of the Examiner is contrary to controlling law as disclosed above. However, to enable the

Examiner to focus his attention on more pertinent matter, claims 2, 8, 14, and 25 have been amended to remove the Unisys CMP system limitation. The rejection of claims 2-3, 9, 14, and 25, as amended, is respectfully traversed.

Claim 20 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of U.S. Patent No. 6,201,536, issued to Hendricks et al (hereinafter referred to as "Hendricks"). This ground of rejection is respectfully traversed for failure of the Examiner to present a *prima facie* case of obviousness as specified by MPEP 2143.

Wang makes no mention of charging a subscriber for a requested program. Therefore, there can be no motivation to have facilities for performing subscriber accounting as claimed. Furthermore, the Examiner has not even attempted to meet his burden of showing reasonable likelihood of success. Finally, because claim 20 depends from claim 17 and the alleged combination cannot meet the limitations of claim 17, the alleged combination does not have all of the limitations of claim 20. The rejection of claim 20 is respectfully traversed for failure of the Examiner to make any of the three required showings for a *prima facie* case of obviousness. The rejection of claim 20 is respectfully traversed.

Having thus responded to each objection and ground of rejection, Applicants respectfully request entry of this

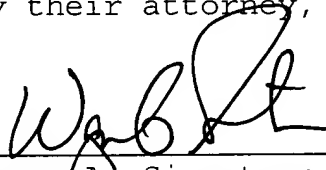
amendment and allowance of claims 1-25, being the only pending claims.

Please charge any deficiencies or credit any overpayment to Deposit Account No. 14-0620.

Respectfully submitted,

Ralph E. Sipple et al.

By their attorney,

A handwritten signature in black ink, appearing to read 'Wayne A. Sivertson', written over a horizontal line.

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